

ABSTRACT

A surface acoustic wave resonator has piezoelectric substrate (11), IDT (13) formed of a plurality of electrode fingers (12) disposed on piezoelectric substrate (11), and reflectors (14) disposed near the opposite ends of IDT (13).

5 IDT (13) has a gradation region where the electrode finger pitch of the plurality of electrode fingers (12) at the opposite ends is different from the electrode finger pitch near the center of IDT (13). In this gradation region, the electrode finger pitches are sequentially varied in the range from the electrode finger at the farthest end that is one end of the gradation region to the electrode finger

10 lying at the other end of the gradation region. The electrode finger pitch of the electrode fingers at the farthest end that is one end of the gradation region is set to be 1 through 5 % smaller than the electrode finger pitch near the center of IDT (13).